

ABSTRACT

5 The present invention includes an integrated multiple-substrate-on-chip-module (MSOCM) assembly. This assembly includes a chip-size package (CSP)-ready MSOCM board having a top surface and a bottom surface. The CSP-ready MCM board includes a plurality of bonding-wire windows and the bottom surface further includes a plurality of board bonding-pads near the bonding-wire window. The assembly further includes an adhesive layer disposed on top of the CSP-ready MCM board having also having a plurality of bonding wire windows corresponding to and aligned with the bonding wire windows on the MCM board. The assembly further includes a plurality of integrated circuit (IC) chips mounted onto the adhesive layer over the top surface of the CSP-ready MCM board. Each of the IC chips is provided with a plurality of chip bonding pads facing an open space defined by the bonding wire windows. The assembly further includes a plurality of bonding wires disposed in the space defined by the bonding-wire windows and interconnected between each of the chip bonding pads and a corresponding board bonding pad disposed on the bottom surface of the CSP-ready MSOCM board.

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